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Hype or Reality: Can the CDM trigger FDI?

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Summary & Conclusions 1

- Inherent in the CDM concept was the expectation that the Clean Development Mechanism might broaden the traditional economic determinants of foreign direct investment flows.

- Such an additional investment opportunity might act as an economic driver and direct Foreign Direct Investment (FDI) towards environmentally supportive investments, such as access to new markets for climate-friendly technologies or services.

Summary & Conclusions 2

- It is generally accepted that the CDM has underperformed and that this situation is likely to continue.

- Reasons typically listed include governance of the Executive Board, CDM objectives, eligibility of projects, or the functioning of emissions markets.

Summary & Conclusions 3

- It is hoped that once these issues are settled, the CDM could live up to its expectations to direct FDI towards greener technologies.

Summary & Conclusions 4

- However, ...but may be there is a big flaw in our argument about FDI/CDM...?

Summary & Conclusions 5

- This report analyses the relation between Foreign Direct Investment and the CDM.
  - It describes various CDM transaction types,
  - provides current CDM project data,
  - presents general FDI flows presented to main destinations of FDI, and
  - finally examines the possible links between FDI and CDM potential.

Summary & Conclusions 6

- The author of this report cautions against over-simplification and concludes that CDM financial flows are not correlated with FDI flows at present.

- Ways to make CDM more attractive to trans-national companies would deserve further exploration.

Generic CDM Transaction Types

The basic CDM transaction models from the perspective of the Annex I (developed country) entity are:

- Investment in CDM projects: equity investment, i.e., direct via joint venture companies/wholly owned subsidiaries or indirect (portfolio) investments via purchase of securities. Such equity based investment provide equity for co-financing of projects that generate CER credits (investor receives profit/ROI and CERs;
- Purchase of yet-to-be-generated CERs: forward contract (e.g., in the form of a carbon purchase agreement) or call option to purchase a specified amount of CERs generated by a CDM project upon delivery, perhaps with some up-front payment;
- CER trade in secondary markets: spot or options transactions in existing CERs.

The Wishful Scenario 1

- Inherent in the CDM concept was the expectation that the Clean Development Mechanism might broaden the traditional economic determinants of foreign direct investment flows...
- That multinational companies (MNC) perceive new CDM-related business opportunities (such as the production of CERs by foreign affiliates (and their subsequent internal use or sale).

The Wishful Scenario 2

- The assumption was that production of CERs would also give the subsidiary or affiliate of a MNC a competitive advantage (e.g. energy efficiency improvements).

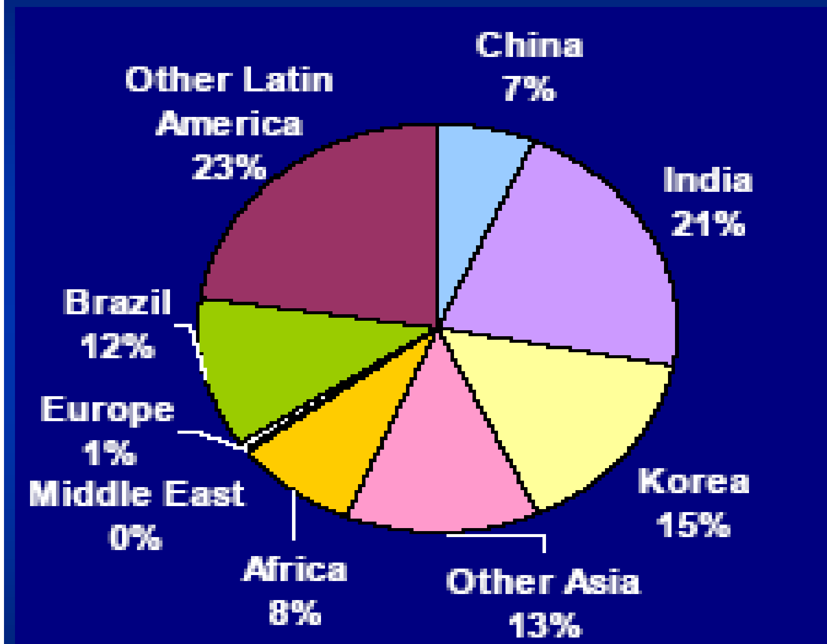
The Current Realities

- The CDM Portfolio update presented by Jane Ellis of OECD at the 2005 SB-meetings in Bonn offers causes for optimism and pessimism alike.

- On the positive side, CDM projects have increased to 5 registered CDM projects, 8 others are requested for registration by the CDM Executive Board of which 3 are under review and 110 CDM projects are under validation which could generate 16.9 Mt Co2-eq.

Geographical Spread Uneven

Geographical spread uneven



- Early dominance by L. America, then Asia
- Africa (8%) and AOSIS (3%) small
- Handful of countries dominate proposed CDM portfolio:
  - India, 21% of credits
  - Korea, 15% of credits
  - Brazil, 12% of credits
  - Mexico, 10% of credits
  - China, 7% of credits
  - Indonesia, 5% of credits
- These countries also received half of FDI flows in 2002

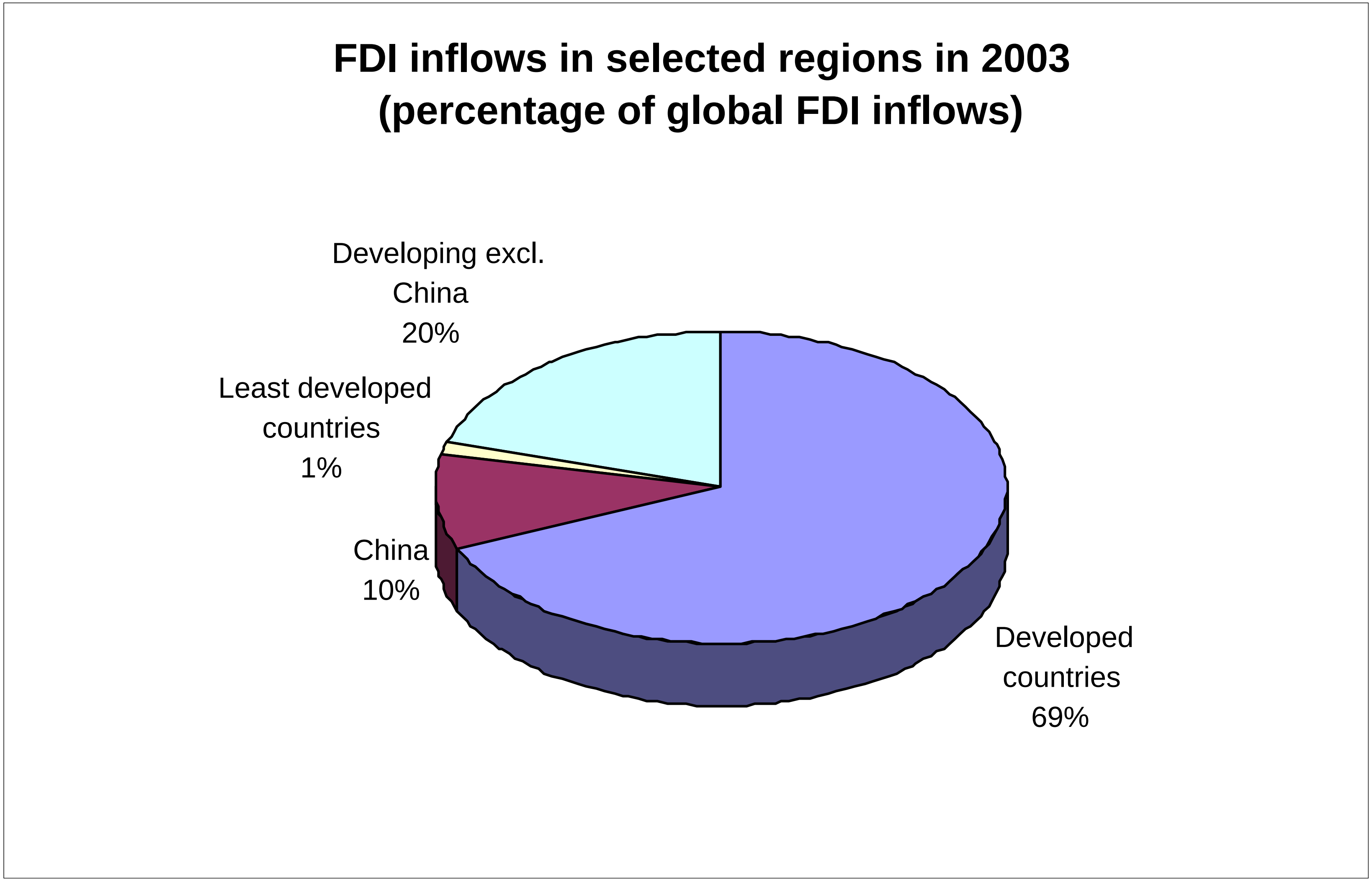
OECD

Annex I Expert Group

The current FDI realities

- While CDM is slowly emerging, the realities of FDI at global level should not be forgotten, they are..

FDI Inflows in Selected Regions in 2003



(*Source: Taffere Tesfachew & Karl P. Sauvant, 2005*)

Traditional & Potential CDM-Related Determinants of FDI Inflows 1

TNC Motive	Selected Economic Determinants	Additional CDM Drives	CDM relevance to TNCs
Market-Seeking	Per capita income Market size Market growth Access to regional/global markets	New/expanded markets for: Climate friendly technologies in developing countries CDM-related services	TNC technology providers TNC providers of CDM-related services (e.g., consulting, brokerage, certification)
Resource Asset-Seeking	Access to labour Access to raw materials Adequate infrastructure	Access to greenhouse gas reduction (CERs)	TNC emitters of greenhouse gases in regulated markets Market intermediaries

Traditional & Potential CDM-Related Determinants of FDI Inflows 2

TNC Motive	Selected Economic Determinants	Additional CDM Drives	CDM relevance to TNCs
Efficiency Seeking	- Differential comparative advantages - Better deployment of global resources	- Low-cost greenhouse gas reductions via CDM projects - Investment in foreign affiliate technology upgrades compensated with CERs	- TNCs emitters of greenhouse gases in regulated markets - TNCs without home country greenhouse gas liabilities
Strategic Asset Seeking	- Access to new competitive advantages	Access to complementary CDM assets possessed by foreign-based firms	- TNC providers of CDM-related services (e.g., consulting, brokerage

FDI Flows and CDM Market Potential 1

From a global perspective, current trends in FDI flows give some indication of the preferences of capital.

- One element in common with the CDM is the quality of the general business environment.
- But FDI flows do not necessarily reflect CDM market potential, for a number of reasons:

FDI Flows and CDM Market Potential 2

1. CDM demand comes from both governments and the private sector, which might have different motivations and preferences. And private sector demand is not all associated with TNCs that operate in developing markets.

FDI Flows and CDM Market Potential 3

2. Conversely, not all TNCs have an interest in Kyoto compliance instruments such as CERs from CDM projects and therefore might not have a compelling incentive to make the required additional investment in climate mitigation.

3. CDM transactions are predominantly in the form of CER trade, rather than equity investment in CDM projects, and not all equity investment in CDM projects will be in the form of direct FDI.

FDI Flows and CDM Market Potential 4

4. FDI might flow to sectors/economies that do not represent large CDM potential.

Vice versa India is expected to be a major supplier of CERs, but its inward FDI is low and non-equity FDI mainly flows to the telecom, IT and business services sectors, which do not have substantial CDM potential.

FDI Flows and CDM Market Potential 5

5. FDI flows to companies do not guarantee investments in climate change mitigation efforts that meet CDM criteria, although technologies that are transferred to developing countries in connection with FDI generally tend to be more modern and environmentally "cleaner" than what is locally available (OECD, 2002).

- Greenfield FDI may even increase absolute greenhouse gas emissions.

FDI Flows and CDM Market Potential 6

6. The necessary institutional prerequisites, specialized capacity and incentives to facilitate CDM investments and to keep transaction costs low...

   ...might be lacking in potential CDM host countries.

Implications and Need for Further Research 1

This paper suggests that the simplistic assumption that CDM financial flows will be correlated closely with FDI flows may not hold and warrants further analysis.

Further research is needed to determine how developing country entities can attract CDM investment or enhance their ability to export CERs. This will require more detailed analysis of:

Implications and Need for Further Research 2

1. the sources of demand (countries; government vs. private; sectors and their CDM preferences),
2. the dynamics of evolving carbon markets,
3. the different CDM transaction models (equity investment in CDM projects vs. *ex ante* CER purchase agreements vs. secondary market CER trades),
4. the national determinants of CDM financial flows, and
5. the possible links between trade flows, FDI and CDM.

Thank you for your attention!

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